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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,064	10/30/2001	Andreas Arlt	12097	5772
28484 7590 02/24/2009 BASF AKTIENGESELLSCHAFT CARL-BOSCH STRASSE 38, 67056 LUDWIGSHAFEN LUDWIGSHAFEN, 69056 GERMANY				
EXAMINER				
COONEY, JOHN M				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
02/24/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

10/018,064

**Applicant(s)**

ARLT ET AL.

**Examiner**

John Cooney

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.4.6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.4.6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Applicant's arguments filed 12-1-08 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,4,6 and 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new limitation to the at least one compound (i) of applicants' claims stating, "and wherein the unsaturated functionality of substantially all of compound (i) based on the weight of the polyurethane foam is either: 1) reacted with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam, or 2) unreacted and available for reaction with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam", lacks support in applicants' originally filed supporting disclosure such that it is evident that applicants, at the time the application was filed, had possession of the claimed invention.

It is not seen that the embodiment pertaining to the degree of availability of the unsaturated functionality as now defined by the claims is provided for by applicants'

supporting disclosure, nor can it be extrapolated from the range of values provided for by the claims in reference to compound (i.)

This is a new matter rejection.

As indicated in the Interview Summary dated 11/24/08, the "use of 'substantially' language in place of the numerical endpoint language would raise similar problems of support without support being shown to be evident., and currently such evidence of support is not seen". Applicants' response has not provided evidence to refute this holding.

Claims 1,4,6 and 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new limitation of applicants' claims that sets forth the provision, "provided that at least a portion of the unsaturated functionality of compound (i.) is reacted with primary and/or secondary amine", lacks support in applicants' originally filed supporting disclosure such that it is evident that applicants, at the time the application was filed, had possession of the claimed invention.

It is not seen that the now claimed embodiment limiting the function of compound (i.) to the degree as is now claimed is supported by applicants' originally filed supporting disclosure.

This is a new matter rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1,4,6 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith (6,114,402).

Smith disclose the preparation of polyurethane foams useful in applications as set forth by applicants' claims prepared from isocyanates, polyols, blowing agents, catalysts, and other additives prepared in the presence of hydroxyethyl acrylates in amounts as claimed by applicants (see column 2 lines 35-47, column 3 lines 46-65, column 6 lines 10-19, and example 6, as well as, the entire document).

As conceded by applicants' own specification, amine group containing compounds are groups which are inherently formed through natural weathering and aging of foamed polyurethane products resulting from the cleavage of urethane groups.

Accordingly, the remaining hydroxyethyl acrylates residing in the structure of the polyurethane products of Smith would inherently react with the formed amines resulting from natural weathering and aging of the foamed products so as to form the products defined by claim 6. Thus, claim 6 is not seen to be distinguished from the teachings of Smith.

Applicants' arguments have been considered. However, rejection is maintained.

The following arguments are maintained as still being applicable:

Smith is maintained to provide for presence of the compounds in the amount provided for by applicants' claims. Distinction of ranges of amount values based on intended use or function of the materials are not evident in distinguishing the claims as they stand. It is held and maintained that applicants have not shown difference in their products and/or processes based on differences in the compositional make-ups and/or processing operations as defined by the claims.

Smith provides a polyurethane composition containing compounds identified by applicants' claims in amounts meeting those of applicants' claims. It provides for its unsaturated functional groups to be available, like applicants' claims, for further reaction. Even after the first application of the foam forming material to a functionalized polyester surface, the foaming/foamed polyurethane has remaining functionality for an additionally applied unsaturated polyester resin, which is evidence that the foaming/foamed composition contains unreacted unsaturated functionality before the additional polyester is applied in order to, thus, meet the claims of applicants' invention. Additionally, it would stand to reason that a meaningful portion of the unreacted unsaturated functionality would remain within the internal structure of the compositions of Smith, thus, still meeting the limitations of applicants' claims.

Smith's full teaching effect is not limited to what is disclosed by the examples. Its full teaching provides extensive overlap extending well beyond the lower endpoint of range of values of applicants' claims. While it is still seen that Smith's example 6 allows for amounts of compounds meeting the ranges of applicants' claims, examiner holds and maintains that its full teaching provides for inclusion of additive meeting applicants' claims far in excess of the amounts of hydroxyethyl acrylate included in Smith's exemplary embodiment.

It is held and maintained that Smith provides preparations of polyurethane foams containing unreacted unsaturated functionality to the degree claimed by applicants

through the presence of compounds meeting those of applicants' claims and difference in the claims in the patentable sense has not been established

It is maintained that Smith et al. is not limited to the degree construed by applicants in its teachings of amounts of ethylenic unsaturation. It is maintained, as set forth again above and in the Interview Summary dated 11/24/08, that Smith's full teachings, including those set forth in column 2, can not be ignored, and Smith provides for the presence of its additive component in amounts exceeding those suggested in applicants' reply.

Additionally, it is maintained that the functions of these compounds and their provided functionality in the systems as claimed are properly held to be inherent to the teachings of Smith for all of the reasons set forth again above. It is maintained that their presence is what allows for the reactions indicated to occur, and applicants have not demonstrated distinctive difference to reside in features of their claims associated with how the compound (i.) and its functionality are present in the formed foams. It is maintained that by applicants' own admission amine group containing compounds are groups which are inherently formed through natural weathering and aging of foamed polyurethane products resulting from the cleavage of urethane groups. Accordingly, the remaining hydroxyethyl acrylates residing in the structure of the polyurethane products of Smith would inherently react with the formed amines resulting from natural weathering and aging of the foamed products so as to form the products defined by applicants' claims. Examiner's position is not one submitting that the result may occur,

but, rather, one asserting the reaction is one allowed for through the presence of the required reactive groups.

As to the newly submitted claims 11 and 12, it is held that heating of a formed urethane foam to the degrees as claimed, whether by storage or placement in extreme heat environments or by heat used in cleaning and sterilization operations, is a process operation that is either inherent to environmental storage and/or readily envisioned by the ordinary practitioner in the art concerned handling and providing formed articles for use.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/

Primary Examiner, Art Unit 1796